

October 9, 2014
Nissan Chemical Industries, Ltd.

To whom it may concern:

Notice of launch of the FCeM[®] Series, a new three-dimensional culture for cancer cells

Nissan Chemical Industries, Ltd. (“the Company”) announces that, in October this year, it began sales of the FCeM[®] Series, a newly developed three-dimensional culture for cancer cells, through its distributor Wako Pure Chemical Industries, Ltd. (President & CEO: Shinzo Kobatake, Head Office: in Chuo-ku, Osaka).

The FCeM[®] Series contains FP001, which is made mainly from gellan gum, a pharmaceutical and food additive. This is a polymer invented by the Company through independent research, which, when added to a culture, forms a three-dimensional microgel with cells distributed evenly throughout.

In anticancer drug screening, cancer cells grown in a two-dimensional environment on plastic plates are usually used. However, this method has a number of disadvantages, not least that the living body and the environment are vastly different and the results of screening may vary from actual outcomes, and a three dimensional culture method is, therefore, required. To address this situation, various three-dimensional culturing base mediums have gone on sale. However, the FCeM[®] Series has a number of distinctive features, including that it is low-cost, enabling more cell masses to be prepared, it has the same viscosity as water and so can be easily mixed with supplements such as serum and growth factor, and it can be combined with low-attachment plates for cell culture applications, enabling the evaluation of molecular targeted anticancer drugs and the mechanism of cancer metastasis.

In joint research with Professor Nakatsuji from the Institute for Integrated Cell-Material Sciences, Kyoto University, the Company is also examining application of the culture medium additive “FP001” to the mass culture of ES/iPS cells and aiming for expansion into the field of regenerative medicine.

The Company will continue working to create new products making full use of its fine organic synthesis, functional polymer design and biological evaluation technologies.